



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/807,704 | 07/25/2001 | Stig Jansson | CU-2513 RJS | 2557 |
| 26530 | 7590 | 05/04/2005 | EXAMINER | |
| LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1200 CHICAGO, IL 60604 | | | WINSTON, RANDALL O | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1654 | |

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,704

Applicant(s)

JANSSON ET AL

Examiner

Randall Winston

Art Unit

1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-32 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgement is made of the receipt and entry of the Request for Continued Examination (RCE) on 01/27/2005.

Examiner has acknowledged that claims 1-12 have been cancelled.

Claims 13-32 and 34 are under examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansson et al. (No. Patent application number 1993 3009) in view of Keyes (US 4,713,335).

Applicant claims a process for separating elements from a material comprising lipids and proteins said material having a biological origin comprising the steps of freezing and mechanically treating the material (also adding pretreatment compounds prior to mechanically treating); determining a denaturing temperature of the material (i.e. determining temperature is determined by visual observation and/or viscosity measurement); heating the material to a temperature approaching but below the determined denaturing temperature of the material; and separating a composition comprising non-denatured protein and at least one of the group consisting of fat and

Art Unit: 1654

lipid from the heated material (i.e. the heated material is grax) wherein the composition is further comprised of trace element; and wherein the process is done under a condition including a vacuum and inert atmosphere.

Jansson et al teach (see, e.g. entire document) a process for separating elements from the claimed biological material compound (i.e., fish or marine material) to obtain high yields of non-denatured protein, fats or lipids and intrinsically producing grax and trace elements when performing Jansson's separation step whereas Jansson's claimed process would also intrinsically produce the claimed composition comprising non-denatured protein and at least one of the group consisting of fat and lipid when such steps are performed as the steps of freezing and mechanically treating the biological material (i.e. please note mechanically treating by grinding and also the reference states one of ordinary skill in the art would add pretreatment compounds such as solvents and/or enzymes because enzymes protect the lipids against oxidation within the process and the reference also states adding antioxidants wherein the process, see, e.g. page 3 and 4) at the same claimed freezing temperature interval (i.e., freezing at -6 degree Celsius); subsequently heating the biological material to a temperature as not to denature the protein contained within the biological material (i.e. please note on page 9 of Jansson et al's specification, it states that the heating should be done at low temperatures not to denature the protein), and then separating and isolating high yields of lipids, fats or non-denatured protein whereas Jansson's process intrinsically produce the claimed composition comprising non-denatured protein and at least one of the group

consisting of fat and lipid. Jansson's process is also done under a condition of a vacuum.

Jansson et al. do not expressly teach claims 30-31 of the denaturing temperature of the material is determined by visual observation (i.e. claim 30) and/or viscosity measurements (i.e. claim 31).

It would have been obvious to one of ordinary skill in the art at the time the invention was created to modify Jansson et al's process to include visual observation to determine the denaturing temperature of a material because visual observation would be an intrinsic feature within '309 to aid in monitoring the temperature within the process in order not allow the protein to become denatured.

Furthermore, Keyes beneficially teaches (see, e.g. column 5 lines 29-35) that viscosity measurements are used to monitor protein denaturation and/or determine the denaturing temperature within a material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jansson et al.'s process to include the disclosure of viscosity measurements are used to monitor protein denaturation and/or determine the denaturing temperature within a material as taught by Keyes' because the combined teachings would create a method of separating elements from a material wherein the elements separated do not contain denatured proteins. The adjustment of conventional working conditions (e.g the heating step is performed continuously and/or semi-continuously, the isolation step and the freezing rate and/or time period), is deemed merely a matter of judicial selection and routine optimization which is well within the

Art Unit: 1654

purview of the skilled artisan. Moreover, as the references indicate the various different steps used by the claimed method is result variable, therefore, they could be routinely optimized by one of ordinary skill in the art of practicing the invention disclosed by the references. (e.g., the ordered pretreatment steps and the ordered mechanically treating steps occurs before said freezing step) (Please note the selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results. (see, e.g., *Ex parte Rubin*, 128 USPQ 440, 1959, and *In re Burhans*, 154 F.2d 690, 69 USPQ 330-CCPA 1946) MPEP 2144.04)

Accordingly, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, especially in the absence of evidence to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Winston whose telephone number is 571-272-0972. The examiner can normally be reached on 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan D. Coe
4-29-05

**SUSAN COE
PRIMARY EXAMINER**